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BROOKS & KUSHMAN P.C. 1000 TOWN CENTER, TWENTY-SECOND FLOOR SOUTHFIELD, MI 48075			EXAMINER	
			NGUYEN, KEVIN M	
			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

Spec -

	•	Application No.	Applicant(s)						
Office Action Summary		09/090,071	MILLER, ROBIN MIHEKUM						
		Examiner	Art Unit						
		Kevin M. Nguyen	2674						
The MAILING DATE of this communication appears on the cover sheet with the correspondence address									
THE N - Exter	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. Isions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Period for reply specified above is less than thirty (30) days, a reply	36(a). In no event, however, ma	y a reply be timely filed	,					
 If NO Failur Any reeame 	period for reply is specified above, the maximum statutory period verse to reply within the set or extended period for reply will, by statute eply received by the Office later than three months after the mailing dipatent term adjustment. See 37 CFR 1.704(b).	vill apply and will expire SIX (6) , cause the application to becom	MONTHS from the mailing date of this co the ABANDONED (35 U.S.C. § 133).						
Status 1\\⊠	Pennancius to communication(s) filed on 19	luna 2002							
1)⊠	Responsive to communication(s) filed on <u>18 J</u>								
2a)⊠	,—	is action is non-final.	matters proposition as to th	o morito io					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims									
· · ·	Claim(s) <u>5-8,12 and 18-21</u> is/are pending in th	e application.							
4a) Of the above claim(s) is/are withdrawn from consideration.									
	Claim(s) is/are allowed.								
·	6)⊠ Claim(s) <u>5-8,12 and 18-21</u> is/are rejected.								
·	Claim(s) is/are objected to.								
8)	Claim(s) are subject to restriction and/or	r election requirement.							
Application	on Papers								
9)[] 7	The specification is objected to by the Examine	r.							
10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.									
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).									
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.									
If approved, corrected drawings are required in reply to this Office action.									
12)☐ The oath or declaration is objected to by the Examiner.									
Priority u	nder 35 U.S.C. §§ 119 and 120		•						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).									
a)[☐ All b)☐ Some * c)☐ None of:								
	1. Certified copies of the priority documents have been received.								
	2. Certified copies of the priority documents have been received in Application No								
	3. Copies of the certified copies of the prior application from the International But the attached detailed Office action for a list	reau (PCT Rule 17.2(a)).	Stage					
	ee the attached detailed Office action for a list	·		onnlication)					
	cknowledgment is made of a claim for domestic			application).					
	☐ The translation of the foreign language pro cknowledgment is made of a claim for domesti	• •							
Attachment	• •								
2) Notice	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice	ew Summary (PTO-413) Paper No(of Informal Patent Application (PTO						

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DETAILED ACTION

The amendment filed on 6/18/2002 is entered. The rejections of claims 5-8, 12, and 18-21 are maintained.

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 5-8 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts (US 5,005,009) in view of Ansaldi et al (US 5,343,206), and further in view of Woolfson et al (US 4,405,940).
- 3. As to claim 5, Robert teaches a head up display for a moving vehicle which has a source 13, and a windshield 10 (see figure 2 and figure 4), a rheostat 33 allows manual intensity control to suit the background lighting in contrast in the environment (see col. 7, lines 67 to col. 8, line 1). Therefore, Roberts teaches all of the claimed limitation of claim 5, except for "an arrangement for controlling the contrast of the heads up display to an environmental image approaching the moving vehicle wherein the arrangement includes an optical detector for capturing the image of the environment approaching the vehicle and a control coupled to the optical detector for controlling the contrast of the heads up display in response to the environmental image approaching the moving vehicle." However, Ansaldi et al teaches a related head up display for moving vehicle (see figure 6, col. 13, lines 1-8) which includes an edge of road 116, a corridor 119, a

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crash barrier 117, a tree 122 (an environmental image as claimed), and a rectangular block 125 which represents a possible obstacle will be colored red or yellow will travel on the opposite side (an approaching the moving vehicle as claimed) (see col. 10, lines 32-42). It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize a head up display 34 taught by Ansaldi in a head up display of Roberts' system because the condition of the road my be detected by means of suitable type adhesion sensors. As regards the type of display used for the perspective representation of the road situation, various arrangements may be provided (see col. 12, line 63 to col. 13, line 1 of Ansaldi et al).

Roberts and Ansaldi et al fail to teach an arrangement for controlling the contrast of the heads-up display relative to an environmental approaching the moving vehicle. However, Woolfson et al teaches a related head-up display including a video camera 5 and television screen 10. It discriminates of the target 11 against the background on the basis of mass intensity contrast and further discriminate the target based on relative motion (environment) connecting via controller 3 and a video tracker 2 (figure 1, col. 6, lines 20-31). It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the discrimination of the target based on relative motion taught by Woolfson et al in Roberts' and Ansaldi et al's head-up display device because this would allow the observer to recognize the target easily.

4. As to claims 6-8, Ansaldi et al teaches a graphic processing 19, which detect obstacles in travel corridor 46 then select the contrast color red or yellow to the background of an environment. If it is greater (YES' output from block 50) data

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processing unit 17 instructs graphics processing unit 19 to prepare a representation of the object in yellow (block 51). If instead the output from block 50 is negative, i.e. if the obstacle is within the safe distance, data processing unit 17 instructs graphics processing unit 19 to represent the object in red (block 55) (see figure 3b, col. 9, lines 32-35 and lines 52-55). It would have been obvious to a person of ordinary skill in the art at the time of the invention to recognize that Ansaldi teaches a data processor 17 which instructs a graphic processing 19 for detecting an obstacles in travel corridor 46 (approaching vehicle), and selecting the contrast color red or yellow to the background of an environment as claimed (see figure 6 and 7).

5. As to claim 12, Robert teaches a method of providing a heads up display (HUD) for a moving vehicle in the manner that has a source 13, and a windshield 10 (see figure 2 and figure 4), a rheostat 33 allows manual intensity control to suit the background lighting in contrast in the environment (see col. 7, lines 67 to col. 8, line 1). Therefore, Roberts teaches all of the claimed limitation of claim 5, except for "controlling the contrast of the heads up display to an environmental image approaching the moving vehicle wherein the step of controlling includes the step of capturing the image of the environment approaching the moving vehicle and controlling the contrast of the heads up display in response to the environmental image captured." However, Ansaldi et al teaches a related method of providing a heads up display in the manner that includes an edge of road 116, a corridor 119, a crash barrier 117, a tree 122 (an environmental image as claimed), and a rectangular block 125 which represents a possible obstacle will be colored red or yellow will travel on the opposite side (an approaching the moving

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vehicle as claimed) (see col. 10, lines 32-42). It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the method of controlling the contrast taught by Ansaldi in a method of Roberts' HUD system because a method of detecting the condition of the road by means of suitable type adhesion sensors. As regards the type of display used for the perspective representation of the road situation, various arrangements may be provided (see col. 12, line 63 to col. 13, line 1 of Ansaldi et al).

Roberts and Ansaldi et al fail to teach an arrangement for controlling the contrast of the heads-up display relative to an environmental approaching the moving vehicle. However, Woolfson et al teaches a related head-up display including a video camera 5 and television screen 10. It discriminates of the target 11 against the background on the basis of mass intensity contrast and further discriminate the target based on relative motion (environment) connecting via controller 3 and a video tracker 2 (figure 1, col. 6, lines 20-31). It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the discrimination of the target based on relative motion taught by Woolfson et al in Roberts' and Ansaldi et al's head-up display device because this would allow the observer to recognize the target easily.

6. As to claims 18 and 20, Robert teaches a head up display for a moving vehicle which has a source 13, and a windshield 10 (see figure 2 and figure 4), a rheostat 33 allows manual intensity control to suit the background lighting in contrast in the environment (see col. 7, lines 67 to col. 8, line 1). Therefore, Roberts teaches all of the claimed limitation of claim 5, except for "an arrangement for controlling the contrast of

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the heads up display to an environmental image approaching the moving vehicle wherein the arrangement includes an optical detector for capturing the image of the environment approaching the vehicle and a control coupled to the optical detector for controlling the contrast of the heads up display in response to the environmental image approaching the moving vehicle." However, Ansaldi et al teaches a related head up display for moving vehicle (see figure 6, col. 13, lines 1-8) which includes an edge of road 116, a corridor 119, a crash barrier 117, a tree 122 (an environmental image as claimed), and a rectangular block 125 which represents a possible obstacle will be colored red or yellow will travel on the opposite side (an approaching the moving vehicle as claimed) (see col. 10, lines 32-42). It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize a head up display 34 taught by Ansaldi in a head up display of Roberts' system because the condition of the road my be detected by means of suitable type adhesion sensors. As regards the type of display used for the perspective representation of the road situation, various arrangements may be provided (see col. 12, line 63 to col. 13, line 1 of Ansaldi et al).

Roberts and Ansaldi et al fail to teach an arrangement for controlling the contrast of the heads-up display relative to an environmental approaching the moving vehicle. However, Woolfson et al teaches a related head-up display including a video camera 5 and television screen 10. It discriminates of the target 11 against the background on the basis of mass intensity contrast and further discriminate the target based on relative motion (environment) connecting via controller 3 and a video tracker 2 (figure 1, col. 6, lines 20-31). Woolfson teaches track window gate 21 to select active and passive

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picture patterns (col. 5, lines 24-35). It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the discrimination of the target based on relative motion taught by Woolfson et al in Roberts' and Ansaldi et al's head-up display device because this would allow the observer to recognize the target easily.

As to claims 19 and 21, Robert teaches a method of providing a heads up display 7. (HUD) for a moving vehicle in the manner that has a source 13, and a windshield 10 (see figure 2 and figure 4), a rheostat 33 allows manual intensity control to suit the background lighting in contrast in the environment (see col. 7, lines 67 to col. 8, line 1). Therefore, Roberts teaches all of the claimed limitation of claim 5, except for "controlling the contrast of the heads up display to an environmental image approaching the moving vehicle wherein the step of controlling includes the step of capturing the image of the environment approaching the moving vehicle and controlling the contrast of the heads up display in response to the environmental image captured." However, Ansaldi et al teaches a related method of providing a heads up display in the manner that includes an edge of road 116, a corridor 119, a crash barrier 117, a tree 122 (an environmental image as claimed), and a rectangular block 125 which represents a possible obstacle will be colored red or yellow will travel on the opposite side (an approaching the moving vehicle as claimed) (see col. 10, lines 32-42). It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the method of controlling the contrast taught by Ansaldi in a method of Roberts' HUD system because a method of detecting the condition of the road by means of suitable type adhesion sensors. As regards the type of display used for the perspective representation of the road situation,

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various arrangements may be provided (see col. 12, line 63 to col. 13, line 1 of Ansaldi et al). If it is greater (YES' output from block 50) data processing unit 17 instructs graphics processing unit 19 to prepare a representation of the object in yellow (block 51). If instead the output from block 50 is negative, i.e. if the obstacle is within the safe distance, data processing unit 17 instructs graphics processing unit 19 to represent the object in red (block 55) (see figure 3b, col. 9, lines 32-35 and lines 52-55).

Roberts and Ansaldi et al fail to teach an arrangement for controlling the contrast of the heads-up display relative to an environmental approaching the moving vehicle. However, Woolfson et al teaches a related head-up display including a video camera 5 and television screen 10. It discriminates of the target 11 against the background on the basis of mass intensity contrast and further discriminate the target based on relative motion (environment) connecting via controller 3 and a video tracker 2 (figure 1, col. 6, lines 20-31). It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the discrimination of the target based on relative motion taught by Woolfson et al in Roberts' and Ansaldi et al's head-up display device because this would allow the observer to recognize the target easily.

- 8. Claims 5-8 and 12 are also rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts in view of Kadomukai et al (JP 402227340), and further in view of Woolfson et al (US 4,405,940).
- 9. As to claims 5 and 12, Robert teaches a method of providing a heads up display (HUD) for a moving vehicle in the manner that has a source 13, and a windshield 10 (see figure 2 and figure 4), a rheostat 33 allows manual intensity control to suit the

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background lighting in contrast in the environment (see col. 7, lines 67 to col. 8, line 1). Therefore, Roberts teaches all of the claimed limitation of claim 5, except for "controlling the contrast of the heads up display to an environmental image approaching the moving vehicle wherein the step of controlling includes the step of capturing the image of the environment approaching the moving vehicle and controlling the contrast of the heads up display in response to the environmental image captured." However, Kadomukai et al teaches a color camera 5, the signal processing part 1 changes the display position of the symbol to such a position that is large in a contrast between the symbol and the background color and easy to recognize the symbol for the operator (see abstract). It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the controlling contrast taught by Kadomukai et al in the HUP of Roberts because this would allow the driver easily distinguishable the obstacle.

Roberts and Kadomukai et al fail to teach an arrangement for controlling the contrast of the heads-up display relative to an environmental approaching the moving vehicle. However, Woolfson et al teaches a related head-up display including a video camera 5 and television screen 10. It discriminates of the target 11 against the background on the basis of mass intensity contrast and further discriminate the target based on relative motion (environment) connecting via controller 3 and a video tracker 2 (figure 1, col. 6, lines 20-31). It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the discrimination of the target based on relative motion taught by Woolfson et al in Roberts' and Kadomukai et al's head-up display device because this would allow the observer to recognize the target easily.

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10. As to claims 6-8, Kudomukai et al teaches a signal processing part 1 for changing and selecting the display portion of the symbol to such a position that is large in the contrast colors between the symbol and the background color (see abstract).

11. As to claims 19 and 21, Robert teaches a method of providing a heads up display (HUD) for a moving vehicle in the manner that has a source 13, and a windshield 10 (see figure 2 and figure 4), a rheostat 33 allows manual intensity control to suit the background lighting in contrast in the environment (see col. 7, lines 67 to col. 8, line 1). Therefore, Roberts teaches all of the claimed limitation of claim 5, except for "controlling" the contrast of the heads up display to an environmental image approaching the moving vehicle wherein the step of controlling includes the step of capturing the image of the environment approaching the moving vehicle and controlling the contrast of the heads up display in response to the environmental image captured." However, Kadomukai et al teaches a color camera 5, the signal processing part 1 changes the display position of the symbol to such a position that is large in a contrast between the symbol and the background color and easy to recognize the symbol for the operator (see abstract). Kudomukai et al teaches a signal processing part 1 for changing and selecting the display portion of the symbol to such a position that is large in the contrast colors between the symbol and the background color (see abstract). It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the controlling contrast taught by Kadomukai et al in the HUP of Roberts because this would allow the driver easily distinguishable the obstacle.

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Roberts and Kadomukai et al fail to teach an arrangement for controlling the contrast of the heads-up display relative to an environmental approaching the moving vehicle. However, Woolfson et al teaches a related head-up display including a video camera 5 and television screen 10. It discriminates of the target 11 against the background on the basis of mass intensity contrast and further discriminate the target based on relative motion (environment) connecting via controller 3 and a video tracker 2 (figure 1, col. 6, lines 20-31). It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the discrimination of the target based on relative motion taught by Woolfson et al in Roberts' and Kadomukai et al's head-up display device because this would allow the observer to recognize the target easily.

- 12. Claims 5-8 and 12 are rejected under 35 U.S.C. 103(e) as being unpatentable over Ejiri et al (US 5,969,969) in view of Woolfson et al.
- 13. As to claims 5 and 12, Ejiri et al teaches a vehicle head up display 160, a LED 125 (source), a windshield and a moving vehicle 100, arranging a camera 124, environment sensor 120 (see figure 33, col. 15, lines 15-32), the environmental signal 126a from the proximity sensor 125 is used to get the shape information of the target obstacles detected near the subject vehicle (controlling the contrast as claimed, see col. 16, lines 38-41), when no obstacle is detected a white circle 125a is displayed, and when an obstacle is detected, a black circle 125b is displayed (see figure 34, col. 16, lines 46-48), the obstacle X detected near the vehicle to produce the environmental information 117a corresponding to the vehicle motion (see figure 34, col. 17, lines 26-28), the obstacle X is gain color (see figure 34 and 35).

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Ejiri et al fails to teach an arrangement for controlling the contrast of the heads-up display relative to an environmental approaching the moving vehicle. However, Woolfson et al teaches a related head-up display including a video camera 5 and television screen 10. It discriminates of the target 11 against the background on the basis of mass intensity contrast and further discriminate the target based on relative motion (environment) connecting via controller 3 and a video tracker 2 (figure 1, col. 6, lines 20-31). It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the discrimination of the target based on relative motion taught by Woolfson et al in Ejiri's head-up display device because this would allow the observer to recognize the target easily.

- 14. As to claim 6-8, Ejiri et al teaches an information processing unit 110 having a selector 113 (see figure 6, col. 7, lines 58-59).
- 15. As to claims 18 and 20, Ejiri et al teaches a vehicle head up display 160, a LED 125 (source), a windshield and a moving vehicle 100, arranging a camera 124, environment sensor 120 (see figure 33, col. 15, lines 15-32), the environmental signal 126a from the proximity sensor 125 is used to get the shape information of the target obstacles detected near the subject vehicle (controlling the contrast as claimed, see col. 16, lines 38-41), when no obstacle is detected a white circle 125a is displayed, and when an obstacle is detected, a black circle 125b is displayed (see figure 34, col. 16, lines 46-48), the obstacle X detected near the vehicle to produce the environmental information 117a corresponding to the vehicle motion (see figure 34, col. 17, lines 26-28), the obstacle X is gain color (see figure 34 and 35).

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Ejiri et al fails to teach an arrangement for controlling the contrast of the headsup display relative to an environmental approaching the moving vehicle. However,
Woolfson et al teaches a related head-up display including a video camera 5 and
television screen 10. It discriminates of the target 11 against the background on the
basis of mass intensity contrast and further discriminate the target based on relative
motion (environment) connecting via controller 3 and a video tracker 2 (figure 1, col. 6,
lines 20-31). Woolfson teaches track window gate 21 to select active and passive
picture patterns (col. 5, lines 24-35). It would have been obvious to a person of ordinary
skill in the art at the time of the invention to utilize the discrimination of the target based
on relative motion taught by Woolfson et al in Ejiri's head-up display device because
this would allow the observer to recognize the target easily.

Response to Arguments

16. Applicant's arguments filed 6/18/2002 have been fully considered but they are not persuasive.

Applicant's arguments with respect to independent claims 5-9, 12, and 18-21 have been considered but are moot in view of the new ground(s) of rejection.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re*

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Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the functionality of control contrast for a head up display (HUD) 34 taught by Ansaldi in Roberts' HUD system because this would improve the condition of the road my be detected by means of suitable type adhesion sensors while as regards the type of display used for the perspective representation of the road situation, various arrangements may be provided (see col. 12, line 63 to col. 13, line 1 of Ansaldi et al).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the functionality of the controlling contrast taught by Kadomukai et al in Roberts HUD system because this would allow the driver easily distinguishable the obstacle against the environment.

In response to applicant's argument that claim 5, 12, 18-21 recite "an arrangement for controlling the contrast of the heads-up display relative to an environmental approaching the moving vehicle." This argument is not persuasive because Woolfson's invention teaches "a video camera 5 and television screen 10. It discriminates of the target 11 against the background on the basis of mass intensity contrast and further discriminate the target based on relative motion (environment) connecting via controller 3 and a video tracker 2 (figure 1, col. 6, lines 20-31). Woolfson teaches track window gate 21 to select active and passive picture patterns (col. 5, lines 24-35)."

In response to applicants' argument that the reference fails to show certain features of applicants' invention, it is noted that the features upon which applicants state

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"an arrangement for controlling the contrast of the heads-up display relative to an environmental approaching the moving vehicle" as recited in claims 5, 12 and 18-21, is not recited in the rejected claims filed in the previous amendment. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims.

In response to applicant's argument that claims 5 and 12 recite "an arrangement includes an optical detector for capturing the image of the environment approaching the vehicle." Ejiri does not teach every element of claims 5 and 12 (page 6, lines 22-26). Examiner disagrees with that situation because Ejiri teaches every element corresponding to claims 5 and 12 (see the rejection above). Ejiri teaches a camera 124 and environment sensor 120 (figure 33, col. 15, lines 15-32).

In response to applicant's argument that "Kadomukai is not an enabling disclosure, i.e., they must place the claimed invention in the possession of the public." Examiner disagrees with that situation because Kadomukai had a public date September 10, 1990. Although, the abstract does not place the claimed invention in the possession of the public; however, the figures 1-10 are the evidences to proved Kadomukai's invention in the possession of the public, see City of Elizabeth v. American Nicholson Pavement Co., 97 U.S. 126, 24 L. Ed. 1000 (1877).

For these reasons, the rejections based on Roberts, Ansaldi et al, Kadomukai et al, Ejiri et al, and Woolfson et al have been maintained.

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Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Kevin M. Nguyen** whose telephone number is **703-305-6209**. The examiner can normally be reached on MON-FRI from 9:00-5:00 with alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard A Hjerpe** can be reached on **703-305-4709**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

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Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered response should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Kevin M. Nguyen Examiner Art Unit 2674

> RICHARD MUERPE SUPERVISORY PATENT EXAMINER TECKNOLOGY CENTER 2600